

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) A method for evaluating acute transplant rejection in a host, comprising:
  - a) obtaining from the host a fluid test sample;
  - b) determining a magnitude of gene expression in the fluid test sample of at least two genes, said genes being selected from one or more gene clusters, said one or more gene clusters being selected from the group consisting of: the pro-apoptotic cluster, the cytoprotective cluster, the IL-7/17 cluster, the IL-8 cluster, the IL-10 cluster, the IL-15 cluster and the T cell cluster;
  - c) comparing the magnitude to a baseline magnitude of gene expression of said at least two genes; and
  - d) detecting thereby upregulation of the at least two genes, wherein upregulation of the at least two genes indicates acute transplant rejection.
2. (Original) The method of claim 1, wherein the fluid test sample is selected from the group consisting of: urine, peripheral blood, bile, bronchoalveolar lavage fluid, pericardial fluid, gastrointestinal juice, feces, and fluid gathered from an anatomic area in proximity to an allograft.
3. (Original) The method of claim 1, wherein the upregulation of the at least two genes indicates early acute transplant rejection.

4. (Original) A method for evaluating acute transplant rejection in a recipient of a urinary system graft, comprising:

- a) obtaining from the host a urine sample;
- b) determining a magnitude of gene expression in the urine sample of at least two genes of a pro-apoptotic gene cluster;
- c) comparing the magnitude to a baseline magnitude of gene expression of said at least two genes; and
- d) detecting thereby upregulation of the at least two genes, wherein upregulation of the at least two genes indicates acute transplant rejection.

5. (Original) The method of claim 4, wherein the at least two genes of the pro-apoptotic gene cluster are selected from the group consisting of: perforin, granzyme B and Fas ligand.

6. (Original) The method of claim 4, wherein the urinary system graft is a renal graft.

7. (Original) The method of claim 4, wherein the upregulation of the at least two genes indicates early acute transplant rejection.

8. (Original) A method of determining the cause of delayed graft function in a host, comprising:

- a) obtaining a sample from a host diagnosed with delayed graft function;
- b) determining a magnitude of gene expression of at least one gene of a pro-apoptotic gene cluster in said sample;
- c) comparing the magnitude to a baseline magnitude of gene expression of said at least one gene; and
- d) detecting thereby upregulation of the at least one gene, wherein upregulation of the at least one gene indicates that the delayed graft function is due to immunological causes.

9. (Original) The method of claim 8, wherein said graft is a renal graft.

10. (Original) The method of claim 9, wherein said sample is a urine sample.

11. (Original) The method of claim 8, wherein said gene of the pro-apoptotic gene cluster is selected from the group consisting of: granzyme B, perforin and Fas ligand.

12-25. (Canceled)

26. (Original) A method of evaluating transplant rejection in a host, comprising:

- a) obtaining from the host a post-transplantation sample;
- b) determining a magnitude of gene expression of a cytoprotective gene found in the post-transplantation sample;
- c) comparing the magnitude to a baseline magnitude of gene expression of said cytoprotective gene; and
- d) detecting thereby upregulation of the cytoprotective gene, wherein upregulation of the cytoprotective gene indicates transplant rejection.

27. (Original) The method of claim 26, wherein the cytoprotective gene is selected from the group consisting of heme oxygenase-1 and A20.

28. (Original) The method of claim 26, wherein the transplant rejection is an acute rejection.

29. (Original) The method of claim 28, wherein the acute rejection is an early acute rejection.

30-42. (Canceled)